

A new intracellular phytase of enterobacteria: Isolation and characterization

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Abstract

A phytase (myo-inositol-1,2,3,4,5,6-hexakisphosphate phosphohydrolase) has been isolated for the first time from a cell lysate of *Pantoea vagans* 3.2 enterobacteria and studied. The enzyme has been assigned to the class of histidine acid phosphatases (EC 3.1.3.26). It has been purified to homogeneity, and its primary structure has been determined. The molecular weight of the protein is 46 kDa, and K_m is 0.28 mM. Some physicochemical properties of the enzyme have been examined. © 2013 Pleiades Publishing, Ltd.

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Keywords

histidine acid phosphatase, *Pantoea vagans*, phytase, properties, purification